



CEC Siting Committee Workshop

Emission Offset Availability for Siting of New Power Plants

February 14, 2001

Mohsen Nazemi, P.E.

Assistant Deputy Executive Officer

South Coast Air Quality Management District



Emission Offset Requirements

- ❖ Applies to New, Modified or Relocated Sources
- ❖ Federal Clean Air Act
- ❖ California State Clean Air Act
- ❖ SCAQMD's New Source Review Rules



SCAQMD Attainment Status

<u>Pollutant</u>	<u>Federal</u>	<u>State</u>
Ozone	Extreme Non-attainment	Extreme Non-attainment
CO	Serious Non-attainment	Serious Non-attainment
PM-10	Serious Non-attainment	Non-attainment
NO ₂	Attainment	Attainment
SO _x	Attainment	Attainment
Lead	Attainment	Attainment



Federal CAA Offset Requirements

❖ Major Source Definitions - (tons per year)

<u>Pollutant</u>	<u>SOCAB</u>	<u>SSAB</u>	<u>MDAB</u>
VOC	10	25	100
Nox	10	25	100
SOx	100	100	100
PM-10	70	70	100
CO	50	100	100

❖ Offset Ratio of 1.5 to 1.0



California CAA Offset Requirements

- ❖ All Sources in Extreme Non-Attainment areas
- ❖ No Net Emission Increase
- ❖ Offset Ratio of 1.0 to 1.0



SCAQMD's Offset Requirements

- ❖ New Source Review Rules
- ❖ Offset ratio of 1.2 to 1.0
 - Emission Offsets (ERCs or RTCs)
 - Exemptions (<4TPY, etc.)
- ❖ Interpollutant Trading
- ❖ Inter-District Trading



SCAQMD ERC Inventory

Pollutant	Available (lbs/day)	Amount Purchased for New Power Generation (lbs/day)	Amount of Inter-District Transfers (lbs/day)
ROG	19,062	4,896	3,689
NO _x	1,104	0	0
SO _x	616	1,002	0
CO	3,952	2,056	0
PM-10	1,156	963	0



Average ERC Transaction Costs - (\$/ton/year)

Pollutant	1997	1998	1999	2000	2001*
ROG	\$4,099	\$3,868	\$3,938	\$5,399	\$8,154
NO _x	\$12,274	\$21,233	\$25,749	\$39,280	\$54,520
SO _x	\$0.0	\$10,353	\$9,200	\$14,069	\$15,781
CO	\$3,495	\$2,851	\$3,254	\$3,764	\$5,573
PM-10	\$10,713	\$14,155	\$12,415	\$21,150	\$44,749

*Average Price through February 2001



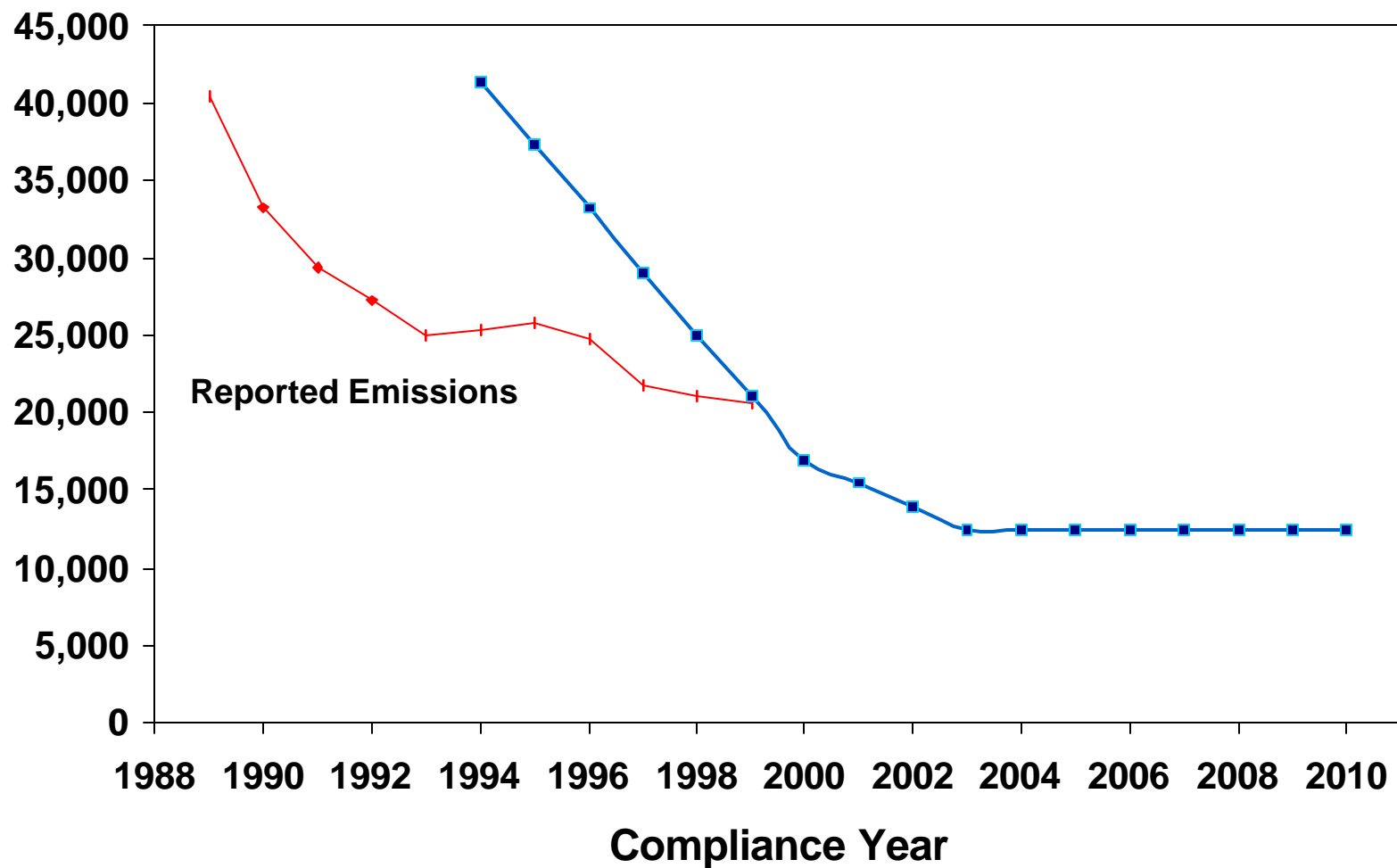
SCAQMD's RECLAIM Requirements for New Power Plants

- ❖ Existing RECLAIM Rules
 - RTCs for 1st year of operation

- ❖ Proposed Amended RECLAIM Rules
 - Power Plant or Non-Power Plant Universe
 - RTCs or AQIP



RECLAIM Facilities RTC Allocations vs. NO_x Emissions





Initial RECLAIM and Power Plants Allocations vs. Power Plants' NO_x Emissions

